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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/559,512

12/05/2005

Yutaka Mizushima

TAK003 P330

3849

277 7590 05/25/2010
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EXAMINER

ALSTRUM ACEVEDO, JAMES HENRY

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

05/25/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center">Advisory Action Before the Filing of an Appeal Brief</p>	Application No. 10/559,512	Applicant(s) MIZUSHIMA ET AL.	
	Examiner JAMES H. ALSTRUM ACEVEDO	Art Unit 1616	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 18 May 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: 1,4,6 and 13.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
 12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____
 13. ☐ Other: _____.

/Johann R. Richter/
Supervisory Patent Examiner, Art Unit 1616

5/22/10

Continuation of 5. Applicant's reply has overcome the following rejection(s): the rejection under 35 USC §112, 2nd paragraph of claims 1, 4,6, and 13 is withdrawn per Applicants' claim amendments.

Continuation of 11. does NOT place the application in condition for allowance because: Applicants' claim amendments have been entered, but do not overcome the remaining rejection under 35 USC § 102(a) or 103(a) nor the provisional obviousness-type double patenting (ODP) rejection. Regarding the rejections based on §§ 102(a) and 103(a), which cite Mizushima et al. (US 2006/0093670), Applicants have argued that these rejections are improper, because allegedly no calcium atoms of the porous hydroxyapatite structure have been replaced with zinc. Applicants contend that the zinc is merely physisorbed to the surface of the porous hydroxyapatite disclosed/taught by Mizushima and that not even a single atom of calcium is replaced by zinc, but Applicants do not provide any evidence of that no calcium is replaced by zinc in Mizushima's materials. Attorney argument in the absence of objective evidence is unpersuasive.

Applicants additionally argue that the § 103(a) rejection over Mizushima in view of Tomlinson is improper because the procedures taught by Tomlinson are not inherent in the teachings of Mizushima. This argument is not understood. Applicants further argue that there is no motivation to combine the teachings of Mizushima and Tomlinson, the prior art recognizes no benefit for the inclusion of zinc into a hydroxyapatite structure, and Applicants have obtained unexpected results. Applicants arguments are factually incorrect, in that the prior art explicitly indicates that incorporation of zinc into hydroxyapatite is desirable because zinc is known to control gingival bleeding and the procedure taught by Tomlinson provides the necessary guidance to adjust the amount of zinc in the porous hydroxyapatite taught by Mizushima.

Regarding the provisional ODP rejection over copending Application No. 10/516,122, Applicants argue that there is no teaching, suggestion, or motivation to obtain porous hydroxyapatite wherein some calcium atoms have been replaced with zinc atoms. The Examiner respectfully disagrees. Independent claim 1 of copending '122 explicitly requires porous hydroxyapatite microparticles having its pores charged with an embolized divalent metal ion. Dependent claim 7 of copending '122 identifies zinc as a suitable divalent metal ion; therefore, it is a prima facie obvious modification of claim 1 of copending '122 to obtain porous hydroxyapatite wherein some calcium has been displaced by zinc. Reference to "embolized divalent metal ion" is understood to refer to a procedure wherein zinc atoms are charged into the porous hydroxyapatite structure by heating. Applicants have not provided evidence that upon embolization of a divalent metal ion (e.g. zinc) that at least calcium atoms would not be displaced with some zinc atoms. The rejection is maintained.